→ SOS ELECTIONS

### Conny McCormack

From: Sent: Conny McCormack

Monday, July 01, 2002 8:11 PM

Subject:

'jmsmith@ss.ca.gov' FW: Follow-up re VSP Advisory Group

John.

Could you please forward this to Lou Didier and Bob Jennings as I guessed at their email addresses and both were returned to me by system administrator. Thanks.

P.S. I hope you had a nice week's vacation.

PPS My reply to the latest SOS survey re Prop 41 will be faxed to Bruce McDannold before 10 a.m. tomorrow (I finished it but there is no one here to ask how many PAVs we had in March 2002). Sorry it is a day or two late. I am interested in knowing how other counties answered 6,8 and 9....

----Original Message----

From:

Conny McCormack

Sent:

Monday, July 01, 2002 8:07 PM

To:

'Ididier@ss.ca.gov'

Cc:

'jmsmith@ss.ca.gov'; 'bjennings@ss.ca.gov'

Subject:

Follow-up re VSP Advisory Group

As I mentioned to you at the CACEO conf. last Wed. in San Diego, I think it is imperative that the new Advisory Group (of registrars/assts) of the VSP be given an orientation to include a clear definition of our role in the process of examining/assessing new voting technology. In discussing this topic with other new members of tis Advisory Group they are in agreement. It needs to be clarified that we are looking only at the OPERATIONAL issues of the systems from the perspective of administration for registrars and operational ease/difficulty for voters. I believe several of the questions on the surveys we were asked to complete on the 2 systems we reviewed on June 18 did not fall into this category and actually asked for our opinion of the software (which is why I refused to answer those). I, and other members of the group (with the possible exception of John T. from Napa) am unqualified to make any such comment/assessment. The orientation should include something in writing (for us and for our successors) and also in person at the next VSP mtg (or a conference call would work also).

Additionally, I want to let you know that just last Thursday (after I returned from San Diego) the L.A. County Grand Jury issued their annual report. A small portion of the report commented on electronic voting equipment (quite negatively and, of course, with little knowledge). Many months ago several of the Grand Jurors came to our office to see our DRE equipment. Although we explained the national and state testing of the hardware/software prior to certification, one of their many questions had to do with whether or not this testing included its suseptibility to sabotage via large magnets being dragged on or very near the equipment (don't ask me who they think might/would do this....a voter, a campaign person wanting to "wipe out" votes in a neighborhood that is known to be heavily partisan in the opposite direction of that person's campaign, etc...) We told them at the time we did not know specifically whether or not magnets were part of the testing. Of course, their comment re magnets appeared in the report along with other suspicions - now I am legally required to respond to their report. Can you tell me whether or not magnets are part of Sec of State testing or if you know whether or not this is part of Wylie/other labs at national level?

Yesterday's LA TIMES included a lengthy article re the Grand Jury's findings of which 2 paragraphs were devoted to the Jurors negative/cautionary assessment of electronic voting equipment. I'll fax you the Grand Jury report (5-6 pages) and the LA TIMES article for your info/files.

On another topic, Lou I know you were expecting some of the VMB members to come by the annual conf. to see the voting equipment/vendors. I never saw any of them or heard that any came by. Did they?

SOS ELECTIONS

### **GOVERNMENT OPERATIONS COMMITTEE**

### **Electronic Voting Machines**

#### BACKGROUND

Many areas in the United States conduct their voting activities by using a punch-card ballot system. In the County of Los Angeles, the voting apparatus has consisted of a flat metallic box-like structure with a narrow slit along one end into which a cardboard voting slip is inserted. The card is printed with a rectangular area on one side filled with squares, in vertical and horizontal rows. In the center of each square is a small rectangular area delineated by an incompletely perforated border. Attached to the metal box is a small punch with a narrow end. In voting, the voter applies this punch to the area surrounded by the semi-perforation. This portion of the card (called a "chad") is punched free when a vote is recorded and falls into a shallow container on the bottom of the voting apparatus leaving a small hole in the voting card.

A voting booklet is attached to the voting device directly over the pocket into which the voting card is slipped. This booklet contains the names of candidates and the options on propositions and proposed legal changes. Each page of the booklet contains a vertical list of the candidates for a specific office, or the options for a specific proposition. Aligned to the right of each list is a vertical row of holes in the booklet's page. A person votes by using the attached punch to make a hole in the voting card through the hole in the booklet's page adjacent to the name of the candidate of the voter's choice. The vertical holes in the pages of the booklet cover a specific vertical row of squares on the voting card. Turning the page in the booklet presents a new list of candidates for a different office, and a new row of vertical holes. The vertical rows of holes in the pages of the booklet move across the voting card beneath to present a new area of the card for each change of page in the booklet. That is, for each different office or proposition being voted on, a different vertical row of squares on the voting card will be punched. At the end of voting one has a card with several vertical rows of squares with and without holes punched in them.

The size of the booklet depends on the number of offices and propositions being voted on and will vary from district to district. The characteristics of a voting area, its ethnic and national background and the language characteristics of its people, determine the number of languages in which the booklet must be printed. In 1984 the California electorate, by a large majority, passed Proposition 38, mandating the elimination of multilingual ballots. It was the general public's opinion, in California, that United States born citizens of voting age should be expected to be competent in the English language, and that naturalized citizens, in becoming naturalized, would be required to demonstrate a reasonable competence in the English language. In voting matters, however, Federal regulations take precedence. If there are 10,000 or more of a particular language group within a district, instruction booklets must be made available in that particular language. In Los Angeles County in the last election, pre-election instruction booklets were necessary in seven different languages. The booklet attached to the voting machine was only in English.

SOS ELECTIONS

When finished voting, a person withdraws the voting card from the voting device and places it in a large ballot box, which also holds the ballots from other voters in that polling place. At the end of the day's voting these cards are collected from the polling areas and transferred to a central location. Here they are fed into a tabulator where the numerical vote is determined by a scanner, which reads the various holes that have been punched in each card.

Under this system, to vote, all a person must be able to do is: (1) to read the booklet regarding candidates and office, or the propositions by name and number, (2) to turn the pages and (3) to make a hole in the voting card with the attached punch.

In the last Presidential election many counties in the State of Florida also used a punch-card form of equipment for voting. After the votes were collected, but while the votes were being counted, several complaints surfaced. The Florida system used what was called a "butterfly" ballot. The line of holes to be punched was not along a single line of choices. Rather, it was between two vertical lists of candidates, with some misalignment between the candidates' names and the holes to be punched in the pages. It was claimed that there was some confusion as to which hole should be punched for which candidate. This led to complaints that some voters had misread the ballot and mistakenly voted for the wrong candidate. It was certainly a complaint that could not be verified, nor corrected, if verified, after the ballots had been gathered together and run through the counting scanner.

Then there was the "chad" problem. As more people vote, there is a build-up in the number of paper chads in the collection box. If this chamber is not periodically emptied, the build-up of the paper chads will impair the action of the punch. The chad may not be punched completely free, leaving a "hanging chad" of varying degrees of separation from the card. As the chamber eventually fills, it may become impossible for the punch to free the chad at all, leaving only a "dimple" in the voting card. If the punch does not leave an adequate hole for the scanner to identify, the counting machine will not register a vote. In Florida, the counting machines did not register a vote for some candidates on some of the ballots. Critics claimed that the "no vote" ballots were incorrectly registered. It was claimed that by not counting these ballots, voting authorities had deprived people of their right to vote. The authorities attempted to solve the problem of missing votes by a hand count of the ballots rejected by the scanner as "not voting." Obviously, the original voter of such a particular ballot could not be identified. The officials doing the hand count tried to decide if hanging chads and dimples were really uncounted attempts to vote. There was much debate and effort expended in this hand counting of the machine-discarded ballots, especially in trying to determine if a "dimpled" ballot really represented an unsuccessful attempt by the voter to vote. People doing the counting frequently

SOS ELECTIONS

disagreed on the interpretation of the same ballot. In many cases there was controversy over whether or not a particular ballot was "dimpled."

Consequently, the punch-card system, itself, was criticized.

The problems in Florida were not present in California. In California there was no butterfly ballot. In the voting booklet there was a single page for each office, one list of candidates per row of punch holes, one list per page, and no margin for misunderstanding. The names of the candidates were aligned with the row of holes to be punched. The collection boxes were regularly emptied. Hence, no chads, hanging or otherwise, interfered with "punching a hole." There was no confusion of "dimples" as an uncounted but intended vote, as punching regularly produced a hole, which was counted by the scanning machine. Voting and counting appeared to be straightforward. Mail in ballots are of the punch-card variety, using a single card with the various squares in which holes are to be punched. Such cards are counted in the same manner as the cards collected from the voting booths.

Because of the national furor, the Secretary of the State of California, in 2001, decertified the punch-card voting equipment, indicating that the equipment was to be replaced as soon as possible. In February 2002, the Federal government was more specific and ruled that the equipment must be replaced in time for the 2004 elections.

#### **OBJECTIVE**

The objective of the Government Operations Committee was to evaluate the proposed electronic voting machines and to compare them with the recently used voting devices.

#### **METHODOLOGY**

The Committee visited the offices of the Registrar of Voters to examine models of the proposed electronic voting machines. Voting officials were available to discuss their plans. Management and engineering personnel presented the equipment and discussed designs of the current first generation model and proposals concerning future designs to the fourth generation models currently on the drawing boards. Use of the current model was explained, and the Committee participated in a hands-on practice of voting using the demonstration model. Details of the possible variations in its structure, the flexibility in its operation, the possibilities of its malfunctioning, and the chance of its being sabotaged, were studied. Pertinent comparisons between the old and the new systems were made.

ŧ

SOS ELECTIONS

#### **FINDINGS**

The first generation electronic model voting machine was both large and heavy. It resembled. somewhat, a small microwave oven with the voting surface on the top appearing like the front of a desktop computer. The "voting booklet" was programmed into the machine as software. Visible directions were projected on the face of the machine through the programming system. The print of the projected instructions was sufficiently large to make reading easy. The voter "turned pages" by touching the proper area of the surface. One voted by touching the area indicated for the particular candidate. This touch registered on the face of the machine and also on an internal counter. Correcting a voting error was performed by touching a "change" or "error" button. The voter could review previous "pages" and correct votes in a simple way.

When finished and satisfied, the voter so indicated by the proper touch. It was then that the internal counting was recorded. The machine accumulated the voting done on it, so that the count on each machine was completed when the voting day was done. At the close of voting it was possible for each machine's count to be transmitted by wire to a central area and combined electronically with the counts from the machines of many other areas. Under most circumstances the speed of counting was a great improvement over prior voting systems. Very little "manpower" was needed in counting. The equipment software could be programmed and reprogrammed to satisfy the variations in candidates and election questions from one district to another and from one election to another. Language variations could be handled in a similar fashion, by an operator's appropriately programming the software.

It appeared possible that absentee electronic voting might be managed through personal computers and/or through the Internet.

On the other hand, voting by simple mail-in ballots was not amenable to this system. Mail-in voting would require another system, such as the prior used punch-card ballot.

The difference in the cost of the necessary software and its periodic reprogramming, from the cost of printing and distributing multiple voting card forms, was not determined: but the Committee estimated that the difference was not a significant factor in the evaluation of the two systems. The varieties of the pre-election instruction booklet would be the same for the two systems. The operation of the electronic machine once programmed, versus the handling and collecting of voting cards during voting, would probably be a plus for the new equipment. Voting for a write-in candidate on the electronic machine was as easy as voting for a write-in candidate on the punch-card.

The size and weight of the latest model electronic machine were marked disadvantages compared to similar features of the machine. Polling places have been staffed, in large part, by elderly

SOS ELECTIONS

retired people. Moving the available electronic machines around, before and after voting hours, could be a difficult task for such people. While the projection for future models of the electronic device suggests a thin, lightweight laptop computer-sized instrument, this development has not yet materialized.

The equipment was used in selected locations in elections in 2000 and 2001. The public reaction was positive and voter confusion appeared minimal. Programming election and candidate variations and allowing write-in choices were easily implemented by the equipment software. A large mass of voting cards, their storage and counting were not necessary. Computerized counting took place during voting.

The Registrar of Voters was considering increasing the size of the current local voting areas. There would be fewer but more centrally positioned voting centers in common gathering places such as shopping malls. It was conjectured that such voting areas with fewer electronic machines could accommodate larger numbers of voters in shorter times, thus reducing equipment and manpower costs. Not too much consideration, here, however, has been given to the fact that such fewer stations would increase the average distance for a voter to travel to vote, and would provide greater travel problems for the elderly and those without personal means of transportation. Preferred parking for voters and politically provided transportation were considered as ways to improve this situation.

The cost of the electronic voting machine, then about \$5,000 each, was expected to decrease to about \$1,000 as its design and engineering improved. With about 5000 voting areas in the Los Angeles County and an average of 4 devices per polling station, the County would need about 20,000 of the new machines, at a cost of at least \$20,000,000. These electronic devices would be expected to have shorter functional lives and higher repair costs than the current equipment. Proposition 41 on the March 2002, ballot requested voter approval for the State of California to spend money on these machines. The amount requested included \$67,000,000, the estimated cost for the purchase and upkeep of the electronic voting machines needed in just Los Angeles County. (Addendum: On March 5, 2002, California voters passed Proposition 41, the Voting Modernization Act of 2002, by a vote of 2,229,531 to 2,103,265, authorizing a bond issue of \$200,000,000.00, to purchase and maintain new voting machines. The cost of the punch-card machines has long since been amortized. The repair and servicing requirements for the punchcard equipment are minimal.

The Government Operations Committee of the 2001-2002 Los Angeles County Civil Grand Jury questioned if enough consideration had been given, by the designers of the electronic voting machine, to the system's integrity and security during the voting process and during storage. There is a potential for sabotage and malicious interference in our society that the Committee felt should be recognized. Care should be taken to minimize this danger. Electrical problems such as a local power outage. a surge or a disruption of any kind could affect any electronic equipment

voting machines during their use.

ø.

(F)

SOS ELECTIONS

then in use. Prolonged outages could delay voting. Transmission line problems could delay the transfer of data to centralized areas. An individual in. or near, the voting area, with a small container holding specialized electronic equipment, might be able to affect the operation of the

The function of the machines might also be disturbed before voting started, while the machines were in storage. The voting results themselves appeared vulnerable. They could be corrupted through the electronic processes involved in voting, disrupting the "ballot" presentation process through the storage and counting mechanisms or during the transmission of the voting data to central areas. Such data loss would be as permanent as the loss of bundles of "punched cards." Absentee ballots voted electronically would be still more difficult to protect. It is probable that the more anti-social individuals in our society would consider the technology of such machines as a tempting challenge, to see if the instrument could be functionally upset, if the system could be made inoperable. Using an Electromagnetic Pulse Device, (EMP), such people could cause a near instantaneous and totally disruptive effect on the operations of the voting machines, particularly on the tapes, the disks, adjacent circuits and other storage systems, if these elements were not properly shielded and protected. The United States House of Representatives' American Services Committee report, HASC 106.31, October, 1999, titled EMP Threats to U. S. Military and Civil Infrastructure describes such threats. In cases of electronic absentee voting, such interference by malicious people would be even more difficult to prevent.

It was while this study was being finalized, February 2002, that the Federal Government mandated the elimination of the punch-card system. This Committee feels the mandate may have been a bit premature. Except for the Florida problem, the punch-card system has been used successfully for many years. It seems possible, if not probable, that in Florida, the difficulty with the system was an inappropriate application of the system, rather than the system itself. While the electronic voting machine offers much promise, it is currently bulky and heavy and still far too expensive. It's susceptibility to interference and sabotage needs further testing. While improved machines are being developed, they should continue to be tested regarding their acceptance by the public, their accuracy, their cost and their safety from interference. If advanced models test satisfactorily and continue to compare equal to or better than the punch-card system, then the latter system could be eliminated.

Everyone concerned should always remember the age-old adage. "If it ain't broke, don't fix it!" Especially, don't, if it's going to cost a lot of money that isn't available!

→ SOS ELECTIONS

## **Government Operations Committee**

# ELECTRONIC VOTING MACHINES RECOMMENDATIONS

- The Government Operations Committee recommends that the Board of Supervisors should urge the Los Angeles County Registrar of Voters to evaluate more extensively the electronic voting machine, during voting, especially as to its acceptability by the voting public, the ease with which it is moved and handled, its vulnerability to functional disruption accidentally or through intentional sabotage, and the accuracy with which it seems to operate.
- 13. The Government Operations Committee recommends that the Board of Supervisors should urge the United States Congressmen representing districts in the County of Los Angeles to urge the Federal Government to rescind the mandate preventing the use of punch-card voting techniques, until such time as a suitably constructed and adequately protected electronic voting machine has been satisfactorily tested.
- 14. The Government Operations Committee recommends that the Board of Supervisors should request from the Federal Government sufficient financing to cover the additional cost that the County of Los Angeles will incur if forced to adopt a new voting machine system before protection for the system has been provided, especially if the new machine involved must be adopted before the machine itself has been completely tested and proven.
- 15. The Government Operations Committee recommends that the Board of Supervisors should direct the County Registrar of Voters not to enlarge the area of voting districts without improving accommodations at and transportation to the new polling places.

\*

wersight: Foster home's has not properly accounted or \$1.3 acklog of abuse probes ccounting is faulted scited L.A. Unified

By STEPHANIE CHAYE IMES STAFF WRITTER MacLaten Children's Center, the oster hone of last resort for the nost troubled children in Los Anagainst children, according to the ng backing of investigations into eles County, is besel with a groweports of abuse by staff members county grand jury.

The 35'-page report by the Civil Grand Jury of 2001-2002, which MacLaren as well as a broad range of other issues originating from nore that 62 citizens' complaints ces and jubble safety. The jurors acts as Les Angeles County's citizen watchdog panel, investigated about education, jails, social servmade recommendations that they believe will improve county gov-

tyry, and that [administrators] as-Angeles Unified School District Among other issues, the 23-member grand jury said the Los

the allegations are against enployees who happen to be friendly toward them," the report released Priday stated. Board of Supervisors to take a billion in state lottery funds, re-ported substandard conditions at some jail facilities; and urged the closer look at potential problems

hent breaks out with the residents Also, internal affairs staff tenter, where the grand jury said a backlog of 8t abuse allegations dating from 1997 to October 2001 is with new electronic voting ma-One of the ongest examinations crucial lapse that could result in in the report focused on MacLaren

MacLaren management reported egations of abuse by staff in at east the past year and a half," and hat none of the reports resulted in to be up-to-date and some may reto the grand jury that police resorts were completed for all the 11criminal charges. Also, in-house investigations at MacLaren are sad sult in actions against staff. great harm coming to children." The backlog gves staff the imprestion that there are few conse-Staff with the Department of iury examiners that the hacklog of abuse reports has worsvences for abusive behavior and fiscourages children from making buse complaints, the jurous con-Children and Family Services told

they focus solely on child abuse s-However, the grand jury said, are particularly important because the broader Department of Children and Family Services investirations, where the backlog exists,

of high-priority investigations, in-

cluding child deaths.

Several MacLaren workers reported that probes into child abuse

allegations are "at best perfunc-

ng and an increase in the number

ened because of inadequate staff-

noney into its general funds since 1984 and called for separate accounting practices. mended that the county take away nvestigative responsibilities from dependent inquiries. One manager with complete autonomy should be Children's Services administrators, who it believes cannot conduct inassigned to all abuse investigacreated to address the code of ailions, and new policies should be ence among staff, the panel said.

materials to snow that it has com-Officials with the Department of Children and Family Services and the interagency Children's Serv-The hike in assaults and atces Corsortium could not eached for comment Saturday.

may have not been accounted for in the right place," he said, "what we are dealing with here is an eso-The district's expenditures on nstructional materials and books That money has not been misspent," Josepi Zeronian, the dis-Saturday. Alhough the money rict's chief financial officer, said olied with state law. teric accounting. which rose from 1,320 in 1999 to -2,329 in 2001, came as the populaiion changed to an older and more ing children more quickly in foster homes, the youths who remain end to be the hardest to place, the lempted assaults at the facility, deeply troubled group. As the facilcrowding in recent years by placly has noved to decrease overeport said.

S such great need, the jury recommended that staffing be reconfig-ured to include a stronger mental Because the population is

nian said. The important thing is

that we are buying the materials."

exceeds the lettery revenue, Zero-

tate law, lottery funds must be ottery tunds since 1998, Under The jury found that the district has sommingled 11.3 billion in lottery use of the school district's share of sed for instructional purposes.

maintenance work for up to six pulled from The jury also said the district should transfer \$27 million in general-fund money into a special fund for lottery-provided matrichional The jury said the Board of Su-

voting machines that the count further studies on he machines. aiming to have in place by the 2

Times staff writer Brita Rayasaki contributed to this report

> · Jails: After touring every jail acility in the county, the jurors ound substandard conditions at

> > findings. The grand jury recon-

cizes Services to Chi

agned to them tend not to give them due diligence because often

sorted that "an atmosphere of aagainst one another, they won't get pervades many MacLaren seems to prevail" that if they talk the backing of colleagues if a mapr An "unwritten agreemen the report said.

sues and could lead to different

eigh: juvenile camps and detention • L.A. United: Jurars hired an independent suditor to review the

plany improvements in areas such school to perform The camps include Camp Holton, Camp Munts and Camp Soudder, which are in seed of physical as testrooms, electrical systems security lighting. Rany of the poor conditions have existed for more than two years. At Camp Paile, the larons found madequate bediding and clothing. Also, juveniles were and dermitory maintenance, and

pervisors should arrange for mmediate repairs and the county should re-prioritive mainlenance

· Voting machines: The nava evaluated the proposed electronic the Board of Supervisors conduct elections and recommended that

The jurors found that they may be sulperable to preakdowns and

C WCCORMVCK 353 4790